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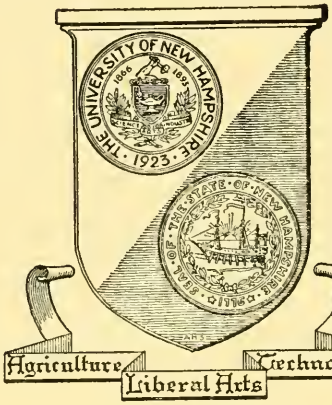


The University
of
New Hampshire

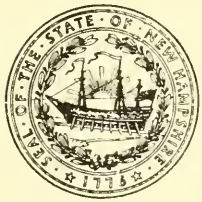
Bulletin 374 August, 1948

NEW HAMPSHIRE
AGRICULTURAL EXPERIMENT STATION

Department of Agronomy

Results of Seeds Tests For 1948

Made for the
STATE DEPARTMENT OF AGRICULTURE



By BESSIE G. SANBORN

THE UNIVERSITY OF NEW HAMPSHIRE
DURHAM, N. H.

RESULTS OF SEED TESTS

Made July 1, 1947, to June 30, 1948

This report contains the results of seed inspection work for the State Department of Agriculture. It includes the inspection of 448 official samples collected throughout the state during the period from July 1, 1947, to June 30, 1948, by Mr. George Laramie, Seed Control Supervisor, and Mr. Vincent Peterson, Inspector. In addition to these official samples, 2,535 private samples were analyzed, making a total of 2,983 samples inspected.

Wholesalers are listed in alphabetical order except when samples are presumed to have been carried over, in which case they are listed alphabetically by dealers. The New Hampshire seed law requires that both agricultural and vegetable seeds must be labeled with the calendar month and year when last tested for germination, and requires that this germination test shall have been completed within nine months of being offered for sale. In the following tables, if the date of test was within the prescribed nine months, the sample is marked satisfactory, "S" in this respect; if no date was given, the word "None" appears, indicating a violation; if the date was a violation of the law because the test was not made within nine months, the date given on the tag or label appears in that column.

The first part of the report deals with 132 samples of agricultural seed tested for purity, germination, and noxious weed content. There is a tolerance or allowable variation from the guarantee for both purity and germination, in accordance with the Rules for Seed Testing adopted by the Association of Official Seed Analysts; for instance, a sample of timothy guaranteed 99.20% for purity and 85% for germination could test as low as 98.25% for purity and 77% for germination and be "satisfactory." If a sample, when tested for purity, falls within the allowable variation, it is marked "S" (satisfactory); if below the allowable variation, and therefore a violation, the actual figure found for purity is given. The same is true for germination in the case of agricultural seeds.

The second part of the report applies to 316 samples of vegetable seeds which were tested for germination only. The New Hampshire seed law requires that unless each packet or other container is plainly marked "Below Standard" together with the percentage of germination, vegetable seeds must test up to the prescribed standard for that kind of seed, and that there is no tolerance from the adopted standards. In the column headed "Found" if the same was up to standard, an "S" (satisfactory) appears. The exception to this is in the case of a given sample which is marked with a guarantee. This figure is not required if vegetable seed is up to standard; then, if the seed is found to be below the regular tolerance from that guaranteed figure, the figure found upon test followed by "÷" is listed as "mislabeled" even though it might in some cases be up to standard.

The New Hampshire seed law and the rules and regulations thereunder, including the germination standards for vegetable seed, follow:

STATE OF NEW HAMPSHIRE

CHAPTER 224, REVISED LAWS

(As inserted by Chapter 54 Laws of 1943)

AN ACT

To Regulate the Labeling, Sale and Offering or Exposing for Sale, of Agrciultural and Vegetable Seeds.

Agricultural and Vegetable Seeds

1. **Definitions.** Terms used in this chapter shall be construed as follows:

I. The term "agricultural seeds" shall include the seeds of grass, forage, cereal and fiber crops and any other kinds of seeds commonly recognized within this state as agricultural or field seeds, and mixtures of such seeds.

II. The term "vegetable seeds" shall include the seeds of those crops which are grown in gardens or on truck farms and are generally known and sold under the name of vegetable seeds in this state.

III. The term "weed seeds" shall include the seeds of all plants generally recognized as weeds within this state, and shall include noxious weed seeds.

IV. Noxious weed seeds shall be divided into two classes, "primary noxious weed seeds" and "secondary noxious weed seeds" as herein defined; provided, that the commissioner of agriculture may add to or subtract from the list of seeds included under either definition whenever he finds that such additions or subtractions are within the respective definitions.

V. "Primary noxious weed seeds" shall include the seeds of perennial weeds such as those that reproduce and spread by underground roots or stems as well as by seed, and which, when established, are highly destructive and difficult to control in this state by ordinary good cultural practice. Primary noxious weed seeds in this state are the seeds of: Canada thistle (Cirsium arvense), field bindweed (Convolvulus arvensis), and quackgrass (Agropyron repens).

VI. "Secondary noxious weed seeds" shall include the seeds of such weeds as are very objectionable in field, lawns, or gardens of this state, but can be controlled by good cultural practices. The secondary noxious weed seeds in this state are the seeds of: dodder (Cuscuta spp.) and crab grass (Digitaria sanguinalis).

VII. The term "labeling" includes all labels, and other written, printed, or graphic representations, in any form whatsoever, accompanying and pertaining to any seed whether in bulk or in containers, and includes invoices.

VIII. The term "advertisement" means all representations, other than those on the label, disseminated in any manner or by any means, relating to seed within the scope of this chapter.

2. **Label Requirement.** Each separate container of agricultural or vegetable seed, including seeds in small packets, which is sold, offered for sale, or exposed for sale, within this state for sowing purposes shall bear thereon or have attached thereto in a conspicuous place a plainly written or printed label or tag in the English language, giving the information as set forth in sections 3 and 4.

3. **Agricultural Seeds.** For agricultural seeds the following is required:

I. Commonly accepted name of kind, or kind and variety, of each agricultural seed component in excess of five per cent of the whole and the percentage by weight of each. Where more than one component is required to be named, the word "mixture" or "mixed" shall be associated with the name on the label.

II. Lot number or other lot identification.

III. Origin, if known, of alfalfa, red clover and field corn (except hybrid corn). If the origin is unknown, that fact shall be stated.

IV. Percentage by weight of all weed seeds, including those known as noxious weeds.

V. Secondary noxious weeds. The name and approximate number of each kind of secondary noxious weed seed, per ounce in groups (A) and (B) and per pound in groups (C) and (D), when present singly or collectively in excess of—

(A) One seed or bulblet in each 5 grams of Agrostis spp., Poa spp., Rhodes grass, Bermuda grass, timothy, orchard grass, fescues (except meadow fescue), alsike and white clover, reed canary grass, Dallis grass, and other agricultural seeds of similar size and weight, or mixtures within this group;

(B) One seed or bulblet in each 10 grams of ryegrass, meadow fescue, foxtail millet, alfalfa, red clover, sweetclovers, lespedezas, smooth brome, crimson clover, Brassica spp., flax, Agropyron spp., and other agricultural seeds of similar size and weight, or mixtures within this group, or of this group with (A);

(C) One seed of bulblet in each 25 grams of proso, Sudan grass and other agricultural seeds of similar size and weight, or mixtures not specified in (A), (B), or (D);

(D) One seed or bulblet in each 100 grams of wheat, oats, rye, barley, buckwheat, sorghums (except Sudan grass), vetches, and other agricultural seeds of a size and weight similar to or greater than those within this group, or any mixtures within this group.

All determinations of noxious weed seeds are subject to tolerances and methods of determination prescribed in the rules and regulations under this chapter.

VI. Percentage by weight of agricultural seeds other than those required to be named on the label.

VII. Percentage by weight of inert matter.

VIII. For each named agricultural seed, percentage of germination, exclusive of hard seed, percentage of hard seed, if present, and the calendar month and year the test was completed to determine such percentages.

IX. Name and address of the person who labeled said seed, or who sells, offers, or exposes said seed for sale within this state.

4. **Vegetable Seeds.** For vegetable seeds, the following is required:

I. Name of kind and variety of seed, and the calendar month and year when last tested for germination.

II. For seeds which germinate less than the standard last established by the commissioner of agriculture hereunder, and in type not smaller than ten point size: percentage of germination exclusive of hard seed; percentage of hard seed, if present; and the words "below standard."

III. Name and address of the person who labeled said seed, or who sells, offers or exposes said seed for sale within this state.

5. **Illegal Sales.** It shall be unlawful for any person to sell, offer for sale or expose for sale any agricultural or vegetable seed within this state:

I. Unless the test to determine the percentage of germination required by sections 3 and 4 shall have been completed within a nine-month period, exclusive of the calendar month in which the test was completed, immediately prior to sale, exposure for sale, or offering for sale or transportation.

II. Not labeled in accordance with the provisions hereof, or having a false or misleading labeling.

III. Pertaining to which there has been a false or misleading advertisement.

IV. Any agricultural seeds containing any primary noxious weed seeds except as may be allowed under tolerances prescribed in the rules and regulations hereunder.

6. **Prohibitions.** It shall be unlawful for any person within this state:

I. To detach, alter, deface, or destroy any label provided for herein or the rules and regulations made and promulgated hereunder, or to alter or substitute seed, in a manner that may defeat the purposes hereof.

II. To disseminate any false or misleading advertisement concerning agricultural or vegetable seed in any manner or by any means.

III. To hinder or obstruct in any way any authorized person in the performance of his duties hereunder.

IV. To fail to comply with a "stop sale" order.

7. **Exemptions.** The provisions of sections 2 to 6, inclusive, do not apply to seed or grain not intended for sowing purposes, nor to seed in storage in, or consigned to, a seed cleaning or processing establishment for cleaning or processing, provided, that any labeling or other representation which may be made with respect to the unclean seed shall be subject to the provisions hereof.

8. **Exceptions.** No person shall be subject to the penalties hereof for having sold, offered or exposed for sale in this state any agricultural or vegetable seeds, which were incorrectly labeled or represented as to kind, variety, or origin which seeds cannot be identified by examination thereof, unless he has failed to take all proper precautions to insure the identity to be that stated in accordance with rules and regulations hereunder.

9. **Duties and Authority of Commissioner of Agriculture.** The commissioner of agriculture, who may act through his authorized agents, shall have the power:

I. To sample, inspect, make analyses of, and test, agricultural and vegetable seeds transported, sold, offered or exposed for sale within this state for sowing purposes, at such time and place and to such extent as he may deem necessary to determine whether said agricultural or vegetable seeds are in compliance with the provisions hereof, and to notify promptly the person who transported, sold, offered or exposed the seed for sale, of any violation.

II. To prescribe, and after public hearing to adopt, rules and regulations governing the methods of sampling, inspecting, analysis, tests, and examination of agricultural and vegetable seed, and the tolerances to be followed in the administration hereof, which shall be in general accord with officially prescribed practice in interstate commerce, and such other rules and regulations as may be necessary to secure the efficient enforcement hereof.

III. To enter upon any public or private premises during regular business hours in order to have access to seeds subject to this chapter and the rules and regulations promulgated hereunder.

IV. To issue written or printed "stop sale" orders which shall prohibit further sale of any lot of agricultural or vegetable seed which the commissioner has reason to believe is in violation of any of the provisions hereof until the law has been complied with or said violation otherwise legally disposed of: Provided, that no "stop sale" order shall be issued or attached to any lot of seed without first giving the owner or custodian of such seed an opportunity to comply with the law or to withdraw the seed from sale.

V. To establish and maintain or make provision for seed testing facilities, to employ qualified persons, and to incur such expenses as may be necessary to comply with these provisions.

VI. To make or provide for making purity and germination tests of seeds for farmers and dealers on request; to prescribe rules and regulations governing such testing; and to fix and collect charges for the tests made. All fees collected hereunder shall be paid over by the commissioner to the state treasurer who shall keep the same in a special fund to be used only for purposes of this chapter.

VII. To cooperate with the United States Department of Agriculture in seed law enforcement.

10. **Seizure.** Upon the recommendation of the commissioner of agriculture or his duly authorized agents, the court of competent jurisdiction in the area in which the seed is located shall cause the seizure and subsequent denaturing, processing, or destruction to prevent the use for sowing purposes of any lot of agricultural or vegetable seed found to be unfit for sowing purposes: Provided, that in no instances shall the denaturing, processing, or destruction be ordered without first having given the claimant of said seed an opportunity to apply to said court for the release of said seed.

11. **Penalties.** Whoever violates any of the provisions of this chapter or any rule or regulation promulgated hereunder shall be fined not exceeding one hundred dollars for the first offense and not exceeding two

hundred and fifty dollars for each subsequent offense. Fines collected hereunder shall be paid, by the court collecting the same, to the commissioner of agriculture and by him forwarded to the state treasurer for the use of the state.

12. **Publication.** The commissioner of agriculture shall publish, or cause to be published, the results of tests and analyses of samples of agricultural and vegetable seeds, as herein provided, together with the names and addresses of the persons from whom the samples of seed were obtained. He may publish such other information as he may deem advisable concerning the value, character and use of certain seeds.

13. **Takes Effect.** This act shall take effect upon its passage.

Approved March 10, 1943.

Sampling.

(a) In order to secure a representative sample, equal portions shall be taken from evenly distributed parts of the quantity of seed to be sampled. Access shall be had to all parts of that quantity.

(b) For free-flowing seed in bags or bulk, a probe or trier shall be used. For small free-flowing seed in bags, a probe or trier long enough to sample all portions of the bag should be used.

(c) Non-free-flowing seed, such as certain grass seed, uncleaned seed, or screenings, difficult to sample with a probe or trier, shall be sampled by thrusting the hand into the bulk and withdrawing representative portions.

(d) The portions shall be combined into a composite sample or samples.

(e) As the seed is sampled, each portion shall be examined, and, whenever there appears to be a lack of uniformity, additional samples shall be taken to show such lack of uniformity as may exist.

Bulk seeds shall be sampled by inserting a long probe or thrusting the hand into the bulk as circumstances require in several uniformly distributed parts of the quantity being sampled.

Bags. (1) In quantities of five bags or less, each bag shall be sampled.

(2) In quantities of more than five bags, at least every fifth bag but not less than five bags shall be sampled. Samples shall be drawn from unopened bags except under circumstances where the identity of the seed has been preserved.

In sampling packet seeds, entire unopened packets shall be taken.

Size of sample. The following are minimum weights of samples of seed to be submitted for analysis, test, or examination:

(1) Two ounces of grass seed not otherwise mentioned, white or alsike clover, or seeds not larger than these.

(2) Five ounces of red or crimson clover, alfalfa, ryegrass, bromegrasses, millet, flax, rape, or seeds of similar size.

(3) Two pounds of cereals, vetches, or seeds of similar or larger size.

(4) Two quarts of screenings.

Analysis.

The New Hampshire seed laboratory will be guided in making purity and germination tests by the rules and regulations prescribed under the Federal Seed Act.

Tolerance.

Owing to the natural variation between tests, the following tolerances shall be allowed between the percentages found by analysis, test or examination and the percentages stated on the tag accompanying the seed:

For purity: Allowing "a" to represent the component being considered and "b" the difference between that percentage and 100, according to the following formula:

$$\text{Pure seed tolerance} = 0.6 + \left(0.2 \times \frac{a \times b}{100} \right)$$

a sample of timothy guaranteed 99.20 would have an allowable variation of .75 or could test as high as 99.95 or as low as 98.45 and be "satisfactory."

For germination: The following tolerances are applicable:

Healthy sprouts found by test in each 100 seeds	Tolerance
96 or over	5
90 or over but less than 96	6
80 or over but less than 90	7
70 or over but less than 80	8
60 or over but less than 70	9
Less than 60	10

Therefore, a sample of seed guaranteed 85% for germination may be as high as 92% or as low as 78% and be "satisfactory."

For weed seeds: The law requires in the labeling of agricultural seed (1) that the percentage of all weed seeds present shall be shown on the tag, (2) that no primary noxious weed seeds shall be present in the sample, and (3) that secondary noxious weed seeds shall be given by name and approximate number, per ounce in groups (A) and (B) and per pound in groups (C) and (D), when present singly or collectively in excess of—

(A) One seed or bulblet in each 5 grams of Agrostis species, Poa species, Rhodes grass, Bermuda grass, timothy, orchard grass, fescues (except meadow fescue), alsike and white clover, reed canary grass, Dallis grass, and other agricultural seeds of similar size and weight, or mixtures within this group;

(B) One seed or bulblet in each 10 grams of ryegrass, meadow fescue, foxtail millet, alfalfa, red clover, sweetclovers, lespedezas, smooth brome, crimson clover, Brassica species, flax, Agropyron species, and other agricultural seeds of similar size and weight, or mixtures within this group, or of this group with (A);

(C) One seed or bulblet in each 25 grams of proso, Sudan grass and other agricultural seeds of similar size and weight, or mixtures not specified in (A), (B), or (D);

(D) One seed or bulblet in each 100 grams of wheat, oats, rye, barley, buckwheat, sorghum (except Sudan grass), vetches, and other agricultural seeds of a size and weight similar to or greater than those within this group, or any mixtures within this group.

Certain tolerances are allowed, however, to provide for variations and unavoidable errors, but only within very narrow limits and for which there is always a standard formula for computation. Examples: (1) Timothy guaranteed only 2 per cent weed seeds will not be condemned if it has a 2.59 per cent. (2) No primary noxious weed seeds are allowed, but the presence of two such seeds in 50 grams of timothy would not be considered a violation. (3) Similarly, some slight variation from the minimum requirement for labeling secondary noxious weed seeds will be passed as satisfactory.

Free Testing.

The Seed Testing Laboratory will allow six free tests, in a given year, to any resident company or person of New Hampshire, but such seeds must be received in the laboratory during the months of November, December, January and February. This number of samples, not including mixtures, may be analyzed either for purity or for germination, or three samples for both purity and germination, free of charge. A given seed company will be entitled to six private tests without charge, but not six from each branch store. For numbers in excess of six, a charge will be made for labor and consumable supplies only, the amount depending on the type of sample according to the following schedule:

Germination tests of all crop seeds, including timothy, clovers and alfalfa, 25 cents each;

Germination tests of all grasses except timothy, 50 cents each;

Germination tests of mixtures, 25 cents for each kind of seed present;

Purity analyses of cereals like corn and oats, 50 cents each; and of timothy, 75 cents each;

Purity analyses of all other kinds of crop seeds, except grasses, 75 cents each;

Purity analyses of the smaller grass seeds and of all mixtures of not more than two kinds of agricultural seeds, $1.00 each;

All purity analyses of special mixtures, including those for lawn and pasture seeding, a charge sufficent to cover the actual cost of working the sample submitted for test, minimum charge of $1.25.

Such private samples of seed to be tested should be drawn in such a way as to be representative of the bulk lot from which they are taken, and should be addressed to the State Seed Testing Laboratory, Durham, New Hampshire. Such private tests cannot be declared as state official tests unless drawn by a representative of the department of agriculture, as provided in Chapter 224 of the Public Laws. Fees must be paid before reports will be sent out.

The minimum weights of samples to be submitted for analysis are:

1. Two ounces of grass seed, white or alsike clover, or seeds not larger than these.
2. Five ounces of red or crimson clover, alfalfa, rye grasses, millet, rape, or seeds of similar size.
3. One pound of cereal, vetches or seeds of similar or larger size.

The minimum number of seeds of any one kind to be submitted for a germination test is 400.

Germination Standards for Vegetable Seed.

Following are the germination standards established by the commissioner of agriculture pertaining to Section four of the act entitled Vegetable Seeds.

	Per cent		Per cent
Artichoke	60	Broccoli	75
Asparagus, including hard seeds	70	Brussells sprouts	70
Beans (except lima)	75	Cabbage	75
Beans, lima	70	Carrot	55
Beets	65	Cauliflower	75
		Celery and celeriac	55

Chicory	65	Parsley	60
Citron	65	Parsnip	60
Collards	80	Peas	80
Corn	75	Pepper	55
Cress, garden	40	Pumpkin	75
Cress, water	25	Radish	75
Cucumber	80	Rhubarb	60
Dandelion	45	Rutabaga	75
Eggplant	60	Salsify	75
Endive	70	Sorrel	60
Fetticus (cornsalad)	70	Spinach (except New Zealand)	60
Kale	75	Spinach (New Zealand)	40
Kohlrabi	75	Squash	75
Leek	60	Swiss chard	65
Lettuce	80	Tomato	75
Muskmelon	75	Tomato, husk	50
Mustard	75	Turnip	80
Okra	50	Watermelon	70
Onion	70		

Labeling.

The following labels are suggested as meeting the minimum requirements of the New Hampshire seed law.

Example for unmixed agricultural seed:

John F. Doe Company
Greene, N. H.

Mammoth Clover — Lot No. 243

Pure seed	98.65	Germination	80%
Crop seed	.86		
Weeds	.38	Hard seeds	7
Inert matter	.11		
Origin Idaho		Date of test Jan. 1948	

1 dodder per oz.

Example for mixed agricultural seed:

John F. Doe Company
Greene, N. H.

Grass seed, mixed — Lot No. 0236

Purity:		Germination:	
Perennial rye grass	32.23%	92.5%	Jan. 1948
Chewing fescue	18.08	85.0%	Dec. 1947
Kentucky bluegrass	14.75	80.0%	Jan. 1948
Canada bluegrass	15.37	58.5%	Jan. 1948
Creeping bent	14.20	84.0%	Jan. 1948
Crop seed	.61		
Weed seed	2.07		
Inert matter	2.69		

5 Crabgrass per oz.

Example for vegetable seed:

(Up to standard)	"New York Lettuce John Smith, Dale, Ill. Date of Germination test: Feb. 7, 1948."
(For vegetable seed which germinates less than standard)	"New York Lettuce John Smith, Dale, Ill. Date of Germination test: Feb. 7, 1948." Germination 75% BELOW STANDARD

The law states that "each separate container of agricultural or vegetable seed, including seeds in small packets, shall be labeled"; but if a dealer has bulk lots of seeds exposed for sale and these bulk lots are properly labeled, he shall not be required to copy the information from the label on to each individual bag in which he delivers small lots of this bulk seed over the counter to customers.

AGRICULTURAL SEED INSPECTION, 1948

Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*	Pure Seed (Note)	Other Crop Seed (Note)	Weed Seed (Note)	Inert Matter (Note)	Germination (Note)	Remarks
ALLEN, STERLING & LOTHROP, Portland, Me. **C. S. Eaton, Conway**								
Bluegrass, Kentucky, 9482	14930	S	L 86.19 F S	S	.19 S	13.62 S	80 S	
L. O. Moulton, Ossipee								
Hungarian Millet, 2469	15047	S	L 99.25 F S	.10 S	.35 S	.30 S	90 63	Germination below guarantee.
Redtop, Fancy, 9737	14937	S	L 92.52 F S	.19 S	1.25 S	6.04 S	90 S	
Timothy, 9704	14936	S	L 99.75 F S	.05 S	.10 S	.10 S	90 S	
Arthur L. Potter, Conway								
Alsike Clover, 9617	15027	S	L 98.84 F S	.34 S	.58 S	.24 S	87 73	Germination below guarantee.
Red Clover, Medium, 9815	15003	S	L 99.50 F S	.24 S	.10 S	.16 S	80 S	
BARBER & BENNETT, INC., Albany, N. Y. **F. B. Spaulding & Co., Lancaster**								
Ladino Clover, 262129	14926	S	L 99.05 F S	.10 S	.15 S	.70 S	86 S	
J. BUCKING GRAIN CO., Bellevue, Ohio **Merrimack Farmers' Exchange, Inc., Concord**								
Oats, Swedish Type, Bin No. 15	14713	S	L 99.25 F S	.60 S	. S	.15 S	95 S	
ARTHUR R. CONE, Buffalo, N. Y. **W. R. Barnett Co., Colebrook**								
Alsike Clover, 25 x 479	15000	S	L 98.05 F S	1.23 S	.45 S	.27 S	78 S	

* As stated on accompanying tag. "S" in this column indicates that date of test was in compliance with law. Figures or "None" indicate violation. Note: L Label; F Found. "S" in the Found line indicates that the sample was satisfactory in relation to the guarantee. Figures indicate violation. A Above guarantee.

Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*	Pure Seed	Other Crop Seed	Weed Seed	Inert Matter	Germination	Remarks
			(Note)	(Note)	(Note)	(Note)	(Note)	
Barley, Wisconsin 38, 52-104	14927	S	L 98.21	1.39	.01	.39	90	
			F S	S	S	S	S	
Barley, Alpha, 52-105	14996	S	L 99.00	..	..	1.00	92	
			F S	S	S	S	S	
Corn, Arco Ensilage, 80 x 248	14973	S	L 99.50	..	..	.50	90	
			F S	S	S	S	S	
Corn, Minn. No. 13, 80-225	14998	S	L 99.50	..	..	.10	90	
			F S	S	S	S	S	
Ladino Clover, 35-42	14991	S	L 99.23	.10	.32	.29	86	
			F S	S	S	S	S	
Mixture, Timothy and Alsike, 12 x 34	14988	S	L ..	1.25	.50	.85	90	
			F ..	S	S	S	.	
Timothy			L 76.60			..	..	Per cent of germination for each kind of seed should be stated.
			F S			..	89	
Alsike			L 20.50			..	..	
			F S			..	87	
Redtop, 30-167	14994	S	L 95.22	.03	.35	4.40	90	
			F S	S	S	S	S	
Soybeans, Black Wilson, 62-65	14972	S	L 99.00	.50	..	.50	85	
			F S	S	S	S	S	
G. B. Currier I. G. A., West Stewartstown								
Red Clover, Medium, 15 x 740	15005	S	L 99.25	.30	.25	.20	80	
			F S	S	S	S	S	
Timothy, 10 x 778	15039	S	L 99.80	.05	.05	.10	90	
			F S	S	S	S	S	
General Mills, Inc., Nashua								
Corn, Leaming, 80 x 291	14904	S	L 99.50	..	..	.50	90	
			F S	S	S	S	74	Germination below guarantee.
Corn, Virginia Eureka, 80 x 278	14921	S	L 99.50	..	..	.50	90	
			F S	S	S	S	S	
Hungarian Millet, 90 x 87	14925	S	L 98.96	.02	.81	.21	85	
			F S	S	S	S	70.5	Germination below guarantee.
Japanese Millet, 90 x 102	14918	S	L 99.00	.05	.85	.10	85	
			F S	S	S	S	S	
Timothy, 10 x 770	14919	S	L 99.70	.11	.13	.06	90	
			F S	S	S	S	67.5	Germination below guarantee.
Johnson Grain Co., Nashua								
Buckwheat, Silverhull Type, 58 x 94	14892	S	L 98.75	.50	.10	.65	87	
			F S	S	S	S	S	
Redtop, 30-172	14900	S	L 93.48	.96	.52	5.04	90	
			F S	S	S	S	S	

Timothy, 10-804	14893	S	L	99.60	.10	.60	.30	90	
			F	S	S	S	S	S	
Timothy, 10 x 764	14897	S	L	99.70	.11	.13	.06	90	
			F	S	S	S	S	S	
Lakes Region Feed & Supply, Laconia									
Oats, Victory, 50 x 136	14886	S	L	97.00	2.81	.19	.02	90	
			F	S	S	S	S	S	
Red Clover, Medium, 15 x 682	14890	S	L	99.05	.45	.37	.13	81	
			F	S	S	S	S	S	
Redtop, 30 x 172	14889	S	L	93.48	.96	.52	5.04	90	
			F	S	S	S	S	S	
White Clover	14885	S	L	99.00			..	70	Label incomplete.
			F	96.13	.36	3.41	.10	A	
F. B. Spaulding Co., Lancaster									
Hungarian Millet, 90 x 101	15026	S	L	98.90	.04	.90	.16	80	Purity and Germination below
			F	96.88	S	2.96	S	65	guarantees. Weed seeds ex-
Red Clover, Medium, 15 x 746	14965	S	L	99.14	.42	.30	.14	80	cessive.
			F	S	S	S	S	S	3.3 dodder per ounce found.
Redtop, 30-171	14992	S	L	92.83	.02	.20	6.95	90	
			F	S	S	S	S	S	
CHARLES M. COX COMPANY, Boston									
Nelson, Warner, Charlestown									
Seed Oats, Wirthmore Brand, Variety unknown	15006	S	L	98.80	.90	.20	.10	94	
			F	S	S	S	S	S	
Wirthmore Grain Store, Nashua									
Seed Oats, Wirthmore Brand, Variety unknown	14922	S	L	98.80	.90	.10	.20	94	
			F	S	S	S	S	S	
DELTA SALES COMPANY, Delta, Pa.									
Rochester Grain Co., Rochester									
Corn, Ensilage, Kato Korn, Lot No. 17	14856	S	L	98.00				90	
			F	S	S	S	S	S	
THE ALBERT DICKINSON CO., Chicago, Ill.									
Colebrook Feed Company, Colebrook									
Alsike Clover, 21289	14981	S	L	97.15	1.05	1.00	.80	82	
			F	S	S	S	S	S	
Redtop, 41422, Ill. origin	14995	S	L	94.90	.21	.61	4.78	90	
			F	S	S	S	S	S	
Timothy, 6651-75-7, Iowa, Ill.	14978	S	L	99.70	.10	.05	.15	90	
			F	S	S	S	S	S	

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A Above guarantee.

Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*		Pure Seed	Other Crop Seed	Weed Seed	Inert Matter	Germination	Remarks
				(Note)	(Note)	(Note)	(Note)	(Note)	
Merrimack Farmers' Exchange, Inc., Concord									
Alfalfa, Grimm, 27853-6-7, South Dakota	14708	S	L	99.18	.22	.34	.26	73	
			F	S	S	S	S	S	
Alsike Clover, 21263-4, Origin Idaho	14706	S	L	98.65	1.10	.20	.05	69	
			F	S	S	S	S	S	
Bluegrass, Kentucky, 032239, No. 1	14710	S	L	89.60	.10	.20	10.10	80	
			F	S	S	S	S	S	
Brome Grass, 09720, No. 2, Origin Canada	14711	S	L	95.32	.02	.02	4.64	93	
			F	S	S	S	S	S	
Red Clover, Medium, 24678, Ill. 427, Neb. 487, Mo. 1070	14712	S	L	99.64	.04	.14	.18	83	
			F	S	S	S	S	S	
Redtop, 41398, Origin Ill. 041769	14709	S	L	95.25	.41	.32	4.02	90	
			F	S	S	S	S	S	
Timothy, 6638-9, Origin Iowa, Ill.	14707	S	L	99.65	.05	.05	.25	91	
			F	S	S	S	S	78.5	Germination below guarantee.
E. STATES FARMERS' EXCH., Springfield, Mass. **Eastern States Farmers' Exchange, Dover**									
Corn, West Branch Sweepstakes, No. 1494	14814	S	L	99.50	..	..	..	92	
			F	S	S	S	S	S	
Field Peas, Lot No. 280, North Dakota	14818	S	L	99.25	..	..	..	75	
			F	S	S	S	S	S	
Hungarian Millet, No. 922	14817	S	L	98.50	.15	1.10	.25	85	
			F	S	S	S	S	71.5	Germination below guarantee.
CHAS. C. HART SEED CO., Wethersfield, Conn. **Turcotte's Hardware Co., Newmarket**									
Corn, Yellow Sweepstakes	14857	S	L	..	..	..	..	74	
			F	99.50	S	S	.50	S	No Lot Number given.
Corn, Longfellow	14875	S	L	..	..	..	..	75	
			F	99.50	S	S	.50	S	No Lot Number given.
THE PAGE SEED CO., Greene, N. Y. **Colebrook Feed Co., Colebrook**									
Corn, Page's Early August, 8027	14964	S	L	99.00	..	..	1.00	90	
			F	S	S	S	S	S	
Corn, Cornell 29-3, No. 8010, Grown, N. Y.	14997	S	L	96.18	..	..	3.82	95	
			F	S	S	S	S	S	
Japanese Millet, J. 5348	14963	S	L	98.21	..	1.56	.23	90	
			F	S	S	S	S	S	
Johnson Grain Co., Nashua									
Hungarian Millet, J-63248	14894	S	L	96.84	..	1.52	1.64	87	
			F	S	S	S	S	S	

THE PARK AND POLLARD CO., Buffalo, N. Y.									
S. M. & E. N. Howard, Bartlett									
Seed Oats, Variety unknown	15053	S	L	95.00	1.50	.20	.40	86	
			F	S	S	S	S	S	
THE STANFORD SEED CO., Buffalo, N. Y.									
Lisbon Grain and Coal Co., Lisbon									
Alsike Clover, 5530	15046	S	L	97.00	2.60	.25	.15	78	
			F	S	S	1.01	S	S	Weed seeds excessive.
Corn, Minn. 13, 5407	14932	S	L	99.00			1.00	90	
			F	S	S	S	S	77	Germination below guarantee.
Corn, Early August, 5342	14957	S	L	99.00			1.00	85	
			F	S	S	S	S	49	Germination below guarantee.
Hungarian Millet, 5577	14961	S	L	99.58	.14	.20	.08	85	
			F	S	S	S	S	S	
Japanese Millet, 1109	14928	S	L	98.90		1.05	.05	85	
			F	S	S	S	S	S	
Ladino Clover, 5550	14960	S	L	99.00	.40	.30	.30	75	
			F	S	S	S	S	S	
Red Clover, Medium, 5606	14931	S	L	99.00	.42	.35	.23	80	
			F	S	1.24	S	S	S	Other crop seeds excessive.
Timothy, 3024	14986	S	L	99.60	.10	.06	.24	90	
			F	S	S	S	S	S	
Merrimack Farmers' Exchange, Inc., Concord									
Corn, Hybrid 29-3, 5536, N. Y., Pa., grown	14705	S	L	99.00			1.00	92	
			F	S	S	S	S	S	
Corn, Hybrid 29-3, 5536, N. Y., Pa., grown	14849	S	L	99.00			1.00	92	
			F	S	S	S	S	S	
L. O. Moulton, Ossipee									
Japanese Millet, 1127	15051	S	L	99.41		.56	.03	87	
			F	S	S	S	S	S	
Nelson-Warner, Charlestown									
Red Clover, Medium, Canada grown	15019	S	L	99.00	.42	.43	.15	80	
			F	S	S	S	S	S	
Redtop, 3081	15020	S	L	92.83	.02	.20	6.95	90	
			F	S	S	S	S	S	
Wirthmore Grain Co., Nashua									
Alsike Clover, 3377	14910	S	L	98.10	1.60	.20	.10	90	
			F	S	S	S	S	S	
Corn, Silobred Hybrid, 3518	14898	S	L	99.50			.50	97	
			F	S	S	S	S	S	
Corn, Leaming, 5399	14909	S	L	99.00			1.00	90	
			F	S	S	S	S	76	Germination below guarantee.

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Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*	Pure Seed (Note)	Other Crop Seed (Note)	Weed Seed (Note)	Inert Matter (Note)	Germination (Note)	Remarks
Corn, Earbred Hybrid, 2745	14914	S	L 99.50	..	..	.50	96	
			F S	S	S	S	S	
Corn, Yellow Sweepstakes, 35-30	14920	S	L 99.00	..	..	1.00	90	
			F S	S	S	S	76	Germination below guarantee.
Redtop, 3084	14907	S	L 92.53	0.00	.61	6.86	90	
			F S	S	S	S	S	
Timothy, 2122	14902	S	L 99.60	.10	.10	.20	90	
			F S	S	S	S	S	
WHITNEY SEED CO., Buffalo, N. Y.								
R. J. Barbin Co., Berlin								
Alsike Clover, 1511	14979	S	L 99.42	.16	.10	.32	67	
			F S	S	S	S	S	
Hungarian Millet, 48521	14962	S	L 98.66	.02	1.08	.24	84	
			F S	S	S	S	S	
Japanese Millet, 46543	14959	S	L 99.00		.90	.10	85	
			F S	S	S	S	S	
Timothy, 1276	14935	S	L 99.65	.10	.10	.15	90	
			F S	S	S	S	S	
Beacon Grain Store, Dover								
Barley, Six Row, 80438	14827	S	L 96.87	1.94	.34	.85	90	
			F S	S	S	S	S	
Soybean's, B. W., 65234	14822	S	L 99.45	.01	.10	.44	80	
			F S	S	S	S	S	
Sudan Grass, 3012	14824	S	L 99.33	.10	.02	.55	90	
			F S	S	S	S	S	
Checkerboard Feed Store, Dover								
Japanese Millet, 46537	14825	S	L 97.72	.02	2.23	.03	85	
			F S	S	S	S	S	
Checkerboard Feed Store, Lancaster								
Corn, Yellow Sweepstakes, 70461	14940	S	L 99.50	..	..	.50	90	
			F S	S	S	S	S	
Corn, Minn. 13, 70453	14983	S	L 99.50	..	..	.50	85	
			F S	S	S	S	S	
Checkerboard Feed Store, Manchester								
Corn, Early August, 70455, Ohio grown	14871	S	L 99.50	..	..	.50	85	
			F S	S	S	S	S	
Red Clover, Medium, 50584, Idaho	14865	S	L 99.46	.42	.08	.04	78	
			F S	S	S	S	S	

Farmers' Feed & Supply Co., Berlin									
Buckwheat, 8139	15041	S	L	98.53	.97	.18	.32	85	
			F	S	S	S	S	S	
Hungarian Millet, 48519	14958	S	L	98.90		.92	.18	80	
			F	S	S	S	S	S	
Japanese Millet, 46530	15028	S	L	99.29	.01	.66	.04	85	
			F	S	S	S	S	S	
Timothy, 1273	15042	S	L	99.65	.10	.05	.20	90	
			F	S	S	S	S	S	
Farmers' Feed & Supply Co., Lancaster									
Barley, 2-rowed, 80437	14943	S	L	97.84	.93	..	1.23	90	
			F	S	S	S	S	S	
Brome Grass, 3867	14976	S	L	95.42	.30	.02	4.26	85	
			F	S	S	S	S	S	
Buckwheat, 8139	15055	S	L	98.53	.97	.18	.32	85	
			F	S	S	S	S	S	
Corn, Cornell 35-5, Hybrid 71313	14967	S	L	99.50	..	..	.50	93	
			F	S	S	S	S	S	
Canada Field Peas, 65239	14968	S	L	99.00	..	..	1.00	90	
			F	S	S	S	S	S	
Red Clover, Medium, 50594	15033	S	L	99.00	.73	.16	.11	80	
			F	S	S	S	S	S	
Reed Canary Grass, 3908	14984	S	L	99.43	.06	.06	.45	70	
			F	S	S	S	S	S	
Soybeans, Black Wilson, 66234	14966	S	L	99.45	.01	.10	.44	80	
			F	S	S	S	S	S	
Spaulding & Son, Nashua									
Alsike Clover, 1595	14911	S	L	99.25	.40	.30	.05	92	
			F	S	S	S	S	58	Germination below guarantee.
Buckwheat, 8136	14908	S	L	98.50	.10	.45	.95	82	
			F	S	.88	S	S	S	Other crop seeds excessive.
Corn, 70446	14906	S	L	99.50	..	..	.50	85	
			F	S	S	S	S	S	
Hungarian Millet, 48518	14905	S	L	98.15	.10	1.00	.75	90	
			F	S	S	2.55	S	S	Weed seeds excessive.
F. H. WOODRUFF'S SONS, INC., Milford, Conn.									
G. N. Bartemus Co., Concord									
Rape, Dwarf Essex	14742	S	L	99.00	1.00	..	..	90	
			F	S	S	S	S	S	

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Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*		Pure Seed (Note)	Other Crop Seed (Note)	Weed Seed (Note)	Inert Matter (Note)	Germination (Note)	Remarks
In the case of the following samples of agricultural seeds, either the wholesaler is unknown or it is presumed that the seed was carried over by the dealer from the previous season; hence, the name of the wholesaler is omitted.									
Beacon Grain Store, Dover									
Barley, Wisc. 38, 80430	14820	1/1947	L	98.94	.95	.01	.10	90	
			F	S	S	S	S	S	Not tested within 9 months.
Corn, Beckwith Early, Cornell 11, 10414	14826	2/1947	L	99.50	..	..	.50	90	
			F	S	S	S	S	S	Not tested within 9 months.
Corn, Yellow Sweepstakes, 70410	14828	2/1947	L	99.50	..	..	.50	90	Not tested within 9 months.
			F	S	S	S	S	34	Germination below guarantee.
Japanese Millet, 46520	14823	None	L	98.80	.21	.87	.12	81	
			F	S	S	S	S	S	No date of test.
Colebrook Feed Co., Colebrook									
Hungarian Millet (Labeled Red Clover)	14982	S	L	98.86	.46	.48	.20	87	Mislaheled as to kind.
			F	97.39	.04	2.55	.02	64.5	3 Canada thistle in 50 grams found.
Checkerboard Feed Store, Dover									
Corn, West Branch Sweepstakes, 70423	14821	2/1947	L	99.50	..	..	.50	88	
			F	S	S	S	S	S	Not tested within 9 months.
Winter Vetch, 6728	14819	2/1947	L	99.88	.05	.01	.06	77	
			F	S	S	S	S	S	Not tested within 9 months.
Checkerboard Feed Store, Lancaster									
Corn, Minn. 13, 70315	14941	3/1946	L	99.50	..	..	.50	85	
			F	S	S	S	S	S	Not tested within 9 months.
G. B. Currier I. G. A., West Stewartstown									
Redtop, 30-158	14939	12/1946	L	92.00	.10	.50	7.40	90	
			F	S	S	S	S	S	Not tested within 9 months.
Farmers' Feed & Supply Co., Colebrook									
Alsike Clover, 25 x 441	14999	1/1946	L	97.00	2.55	.25	.20	78	
			F	S	S	S	S	S	Not tested within 9 months.
Buckwheat, 8126	14989	5/1947	L	99.96	.01	.01	.02	90	Not tested within 9 months.
			F	98.87	S	.60	S	S	Purity below guarantee. Weed seeds excessive.
Hungarian Millet, 90.35	14987	12/1945	L	98.54	.13	1.28	.05	90	
			F	S	S	S	S	S	Not tested within 9 months.
Ladino Clover, 35-13	15002	12/1945	L	98.35	.05	.65	.95	62	
			F	S	S	S	S	S	Not tested within 9 months.
Red Clover, Medium, 15 x 594	15025	1/1946	L	99.00	.63	.27	.10	72	
			F	S	S	S	S	S	Not tested within 9 months.

Redtop, 40444	14985	1/1947	L	92.00	1.00	.50	6.50	89	
			F	S	S	S	S	S	Not tested within 9 months.
Timothy, 1242	14993	2/1947	L	99.60	.10	.05	.25	90	
			F	S	S	S	S	S	Not tested within 9 months.
Vetch, Spring, 6727	15001	1/1947	L	96.85	2.32	.02	.61	86	
			F	S	S	S	S	S	Not tested within 9 months.
Wheat, Henry Red Spring, 54 x 78	14970	4/1947	L	99.50	..	..	.50	90	
			F	S	S	S	S	S	Not tested within 9 months.
Lakes Region Feed & Supply, Laconia									
Timothy, 10 x 798	14884	None	L	99.66	.04	.08	.23	90	
			F	S	S	S	S	S	No date of test.
Merrimack Farmers' Exchange, Inc., Concord									
Oats, Swedish Type, Michigan	14714	None	L	..	..	..	..	..	Not guaranteed for purity or germination.
			F	99.02	.50	.05	.43	95	No date of test. 7 quackgrass in 100 grams found.
Arthur L. Potter, Conway									
Buckwheat, 8529	15030	12/1946	L	99.90	..	.01	.09	90	
			F	S	S	S	S	S	Not tested within 9 months.
Hungarian Millet, 2469	15035	3/1947	L	99.25	.10	.35	.30	90	Not tested within 9 months.
			F	S	S	S	S	80	Germination below guarantee.
Japanese Millet, 81-8	15034	4/1947	L	98.77	..	1.23	..	88	Not tested within 9 months.
			F	96.17	S	S	3.35	S	Purity below guarantee. Inert matter excessive.
Timothy, 8364	14933	1/1947	L	99.65	.05	.05	.25	92	
			F	S	S	S	S	S	Not tested within 9 months.
Wirthmore Grain Co., Nashua									
Buckwheat, Japanese, 5357	14915	None	L	99.80	..	.10	.10	85	
			F	S	S	S	S	S	No date of test.

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New Hampshire Agricultural Experiment Station

VEGETABLE SEED INSPECTION, 1948

Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*	Germination		
			Found (Note)	Guaranteed**	N. H. Standard
ALLEN, STERLING & LOTHROP, Portland, Me.					
Carroll County Hardware, North Conway					
Beans, Red Kidney	15045	S	S	85	75
Beans, Soldier	15048	S	S	90	75
Beans, Yellow Eye	15052	S	S	90	75
Corn, Golden Sunshine	14929	S	S	90	75
Peas, Gradus	15029	S	S	90	80
Central Feed & Supply Co., Somersworth					
Beans, Pencil Pod Black Wax	14867	S	S	83	75
Beans, Kentucky Wonder	14874	S	S	85	75
Corn, Golden Bantam	14873	S	S	90	75
Peas, Dwarf Telephone	14866	S	S	90	80
Hicks' Hardware, Colebrook					
Peas, Tall Telephone	14977	S	S	90	80
Stone's Hardware Co., Gorham					
Beans, Dwarf Horticultural	14980	S	S	88	75
Beans, Low's Champion	15037	S	S	89	75
Peas, Little Marvel	14971	S	64	85	80
Peas, Blue Bantam	14990	S	S	85	80
Peas, Improved Tall Telephone	15038	S	S	80	80
ASSOCIATED SEED GROWERS, INC., Milford, Conn.					
Merrimack Farmers' Exchange, Inc., Concord					
Beans, Pencil Pod Black Wax, 71223	14719	S	S	90	75
Beans, Cherokee Wax	14720	S	S	80	75
Beans, Tenderlong, 7437	14723	S	S	83	75
Beans, Brittle Wax, 71213	14724	S	S	80	75
Beans, Plentiful, 52645	14725	S	S	90	75
Lima Beans, Henderson Bush	14727	S	71÷	80	70
Corn, Maine Top Cross Bantam	14737	S	S	90	75
Cucumber, White Spine	14728	S	S	90	80
Cucumber, Marketer	14731	S	S	90	80
Cucumber, Straight 8	14732	S	S	87	80
Cucumber, Boston Pickling	14736	S	S	86	80
Lettuce, Prizehead	14735	S	S	90	80
Melons, Canteloupe, Granite State	14733	S	S	90	75
New Zealand Spinach	14730	S	40÷	70	40
Onions, Yellow Globe Danvers	14738	S	70÷	82	70
Peas, Gradus, 79080	14715	S	S	90	80
Peas, World's Record, 79172	14716	S	S	90	80
Peas, Laxtonian, 71051	14717	S	78	90	80
Peas, Dwarf Telephone, 7309	14718	S	72	87	80
Peas, Laxton's Progress	14721	S	S	86	80
Peas, Tall Telephone	14722	S	S	90	80
Peas, Little Marvel, 5332	14726	S	80÷	90	80
Squash, Blue Hubbard, 70747	14734	S	S	90	75
Swiss Chard, Lucullus	14729	S	S	71	65
L. O. Moulton, Ossipee					
Corn, Golden Bantam	15049	S	S	90	75
BRECK'S, Boston, Mass.					
Curtis Hardware, Berlin					
Peas, Sutton's Excelsior	15040	S	S	80	80
Gardener Hardware, Inc., Concord					
Beets, Detroit Dark Red	14756	S	S	65	65
Broccoli, Italian Green Sprouting	14757	S	S	80	75
Carrot, Golden Beauty	14758	S	S	55	55
Endive, Green Curled	14759	S	S	70	70
Parsnip, Hollow Crown	14760	None	S	..	60
A. L. Haskins, Wolfeboro					
Beans, Low's Champion	15043	S	S	75	75

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** Sometimes stated on label but is not required if vegetable seed is up to standard.

Note: S in this column indicates that the sample was satisfactory,—up to standard and within the allowable variation from the guarantee. Figures alone indicate that the sample was below standard. ÷ after the figure indicates that the sample was up to standard but below guarantee.

Name and Address of Wholesaler Name and Address of Dealer Kind of Seed	Sample No.	Date Tested*	Germination		
			Found	Guaranteed**	N. H. Standard
			(Note)		
Jefferson Feed & Supply Co., Rochester					
Beans, Vermont Cranberry	14845	S	S	75	75
Beets, Crosby's Egyptian	14830	S	57.5	70	65
Cabbage, Danish Ballhead	14831	S	S	80	75
Corn, Golden Sunshine	14847	S	S	75	75
Lettuce, Big Boston	14832	S	S	80	80
Muskmelon, Bender's Surprise	14834	S	S	80	75
New Zealand Spinach	14833	S	32	45	40
Peas, Blue Bantam	14846	S	S	80	80
Reddy's Market, Contoocook					
Beans, Pencil Pod Green Bush	15069	S	S	75	75
Beans, Pencil Pod Black Wax	15070	S	S	75	75
Onion, Yellow Globe Danvers	15121	S	S	75	70
Spinach, Bloomsdale	15117	S	S	65	60
Tomato, Certified Marglobe	15116	S	S	80	75
Spencer Hardware, Keene					
Beans, Soldier	15096	S	S	75	75
Beans, Yellow Eye	15097	S	S	75	75
Corn, Tendergold	15095	S	S	75	75
Woodsville Hardware Co., Woodsville					
Beans, Goddard	15147	S	S	75	75
Beans, Horticultural	15148	S	S	75	75
Beans, Sure Crop Stringless	15149	S	S	84	75
W. ATLEE BURPEE, Philadelphia, Pa. **Mabbett Home & Auto Supply, Rochester**					
Beans, Red Kidney	14852	S	S	91	75
Beets, Crosby's Egyptian	14835	S	51.5	75	65
Carrot, Tendersweet	14836	S	S	65	55
Leek, Broad London	14838	S	S	70	60
Lettuce, Grand Rapids	14839	S	S	80	80
Onion, Southport Yellow Globe	14837	S	53	80	70
COMSTOCK, FERRE CO., Wethersfield, Conn. **Beacon Grain Store, Dover**					
Beans, Yellow Eye	14812	S	S	95	75
Beans, Improved Golden Wax	14813	S	72	85	75
Sweet Corn, Marcross Hybrid	14811	S	S	95	75
Sweet Corn, Golden Sunshine	14815	S	S	89	75
Peas, Little Marvel	14810	S	76	92	80
Peas, Dwarf Alderman	14816	S	S	85	80
J. B. Griffin, Newmarket					
Beans, Top Notch Golden Wax	14848	S	67	85	75
Corn, Golden Bantam	14869	S	S	90	75
Peas, Nott's Excelsior	14870	S	S	90	80
H. P. Maxfield, Pittsfield					
Beans, Kentucky Wonder Wax Pole	14881	S	S	..	75
Beans, Kentucky Wonder Green Pod	14888	S	S	..	75
Spaulding & Son, Nashua					
Beans, Pencil Pod Black Wax	14913	S	S	80	75
Corn, Golden Cross Bantam	14896	S	S	90	75
Peas, Thomas Laxton	14895	S	S	90	80
CROSSMAN SEED CORP., East Rochester, N. Y. **S. S. Kresge, Concord**					
Asparagus, Mary Washington	14773	S	S	70	70
Carrot, Chantenay Red Core	14769	S	S	55	55
Eggplant, Black Beauty	14770	S	S	60	60
Leek, American Flag	14771	S	S	60	60
Onion, Yellow Sweet Spanish	14772	S	S	70	70
EASTERN STATES FARMERS' EXCHANGE, West Springfield, Mass. **Eastern States Farmers' Exchange, Concord**					
Beets, Crosby Early Wonder, V 600	14784	S	67÷	80	65
Cabbage, Marion Market, V 982	14785	S	S	85	75
Eggplant, N. H. Hybrid, V 743	14786	S	S	60	60
Kohlrabi, White Vienna, V 43	14787	S	S	80	75

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			Found (Note)	Guaranteed**	N. H. Standard
Lettuce, Oak Leaf, V 24	14788	S	S	80	80
Muskmelon, Emerald Gem, V 278	14789	S	S	90	75
Onion, Silverskin White Portugal	14790	S	S	90	70
Parsley, Paramount, V 209	14791	S	S	60	60
Eastern States Farmers' Exchange, Dover					
Onion, Yellow Globe Danvers, V 264	14792	S	S	90	70
Eastern States Farmers' Exchange, Manchester					
Beans, California Red Kidney, V 797	14805	S	S	85	75
Broccoli, Early One, V 858	14797	S	S	85	75
Cabbage, Danish Red, V 930	14796	S	S	90	75
Celery, Tall Fordhook, V 841	14798	S	S	90	55
Lettuce, White Boston, V 717	14795	S	S	85	80
Onion, Utah Valencia, V 977	14793	S	S	90	70
Onion, Early Yellow Globe, V 178	14794	S	S	95	70
Pepper, Long Red Cayenne, V 723	14799	S	S	55	55
Pepper, Long Red Cayenne, V 723	14800	S	S	55	55
Spinach, Longstanding Bloomsdale, V 66	14802	S	S	75	60
Turnip, Purple Top White Globe, V 606	14801	S	S	80	80
Watermelon, Kleckley's Sweet, V 42	14803	S	S	90	70
EMPIRE SEED CO., Fredonia, N. Y. **Wheeler's Store, Warner**					
Beets, Early Wonder	15126	S	S	65	65
Carrot, Tender Sweet	15122	S	S	55	55
Onion, Yellow Globe Danvers	15125	S	S	70	70
Parsley, Hamburg	15119	S	S	60	60
Pepper, Pimento	15124	S	S		55
Radish, Early Scarlet Turnip	15115	S	S	75	75
Radish, Early Crimson Giant Globe	15118	S	S	75	75
FERRY-MORSE CO., Detroit, Mich. **J. J. Newberry Co., Concord**					
Beets, Detroit Dark Red	14750	S	57	75	65
Carrot, Chantenay Red Core	14749	S	S	60	55
Chicory, Asparagus or Catalogna	14748	S	S	65	65
Cucumber, Early White Spine	14747	S	S	85	80
Tomato, Ponderosa (Beefsteak type)	14746	S	S	85	75
GENERAL MILLS, INC., Portsmouth, N. H. **General Mills, Inc., Exeter**					
Cauliflower, Snowball	15139	S	S	..	75
Parsnip, Hollow Crown	15134	S	49	..	60
CHAS. C. HART SEED CO., Wethersfield, Conn. **K. W. Cota, North Haverhill**					
Beans, Goddard or Boston Favorite	15142	S	S	90	75
Holbrook Grocery Co., Keene					
Beans, Top Notch Golden Wax	15084	S	66	85	75
Beans, Red Kidney	15085	S	75÷	85	75
Beans, Tender Green	15086	S	S	85	75
J. Jones & Son, Alton					
Peas, Dwarf Telephone	14891	S	71	81	80
H. P. Maxfield, Pittsfield					
Squash, Blue Hubbard	14887	S	S	..	75
Turnip, White Egg	14883	S	S	..	80
Merrimack Farmers' Exchange, Inc., Concord					
Beans, Golden Wax Improved, 1152	14829	S	75÷	85	75
Nelson-Warner, Charlestown					
Sweet Corn, Country Gentleman	15013	S	S	..	75
Sweet Corn, Golden Cross Hybrid, 1456	15014	S	S	85	75
Peas, Little Marvel	15011	S	S	..	80
F. B. Spaulding Co., Lancaster					
Beans, Burpee's Stringless Green Pod	15004	S	68.5	85	75
Beans, Pencil Pod Black Wax	15050	S	S	85	75
Corn, Golden Sunshine	14974	S	S	96	75
Peas, Admiral Dewey	14934	S	S	85	80
Peas, Dwarf Peter Pan	14975	S	S	90	80

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			(Note)		
Sunshine Feed Store, Keene					
Beans, Kentucky Wonder	15087	S	S	85	75
Beans, Bountiful	15088	S	S	85	75
Beans, French Dwarf Horticultural	15089	S	S	90	75
Turcotte Hardware, Newmarket					
Beans, Yellow Eye	14853	S	S	90	75
Corn, Early Golden Bantam	14861	S	S	85	75
Peas, Thomas Laxton	14859	S	S	85	80
BUDD D. HAWKINS, Reading, Vt.					
K. W. Cota, North Haverhill					
Beans, Vermont Cranberry	15141	S	S	80	75
Kiniry's Hardware, Claremont					
Beets, Early Blood Turnip	14946	S	S	65	65
Carrot, Nantes Coreless	14948	S	S	55	55
Cucumber, Straight 8	15008	S	S	80	80
Onion, Yellow Globe Danvers	14950	S	30.5	70	70
Turnip, White Sweet German	15018	S	S	.	80
Strafford Feed Store, Somersworth					
Beets, Detroit Dark Red	14842	S	S	65	65
Carrot, Danvers Half Long Orange	14840	S	S	55	55
Cucumber, Improved White Spine	14841	S	S	80	80
Parsnip, Improved Hollow Crown	14843	S	S	60	60
Turnip, White Sweet German	14844	S	S	80	80
HOLBROOK GROCERY CO., Keene					
Nelson-Warner, Charlestown					
Beans, Pencil Pod Black Wax	15016	S	S	..	75
Beans, Vermont Cranberry	15021	S	S	.	75
Beets, Detroit Dark Red	14947	S	S	.	65
Peas, Nott's Excelsior	15012	S	S	..	80
KENDALL & WHITNEY, Portland, Me.					
J. Jones & Son, Alton					
Beans, Low's Champion Bush	14879	S	S	87	75
D. LANDRETH SEED CO., Philadelphia, Pa.					
Ayers & Jenkins Co., Rochester					
Beans, Landreth's Stringless Bush	14863	S	S	85	75
Corn, Improved Golden Bantam	14862	S	S	85	75
Peas, Sutton's Excelsior	14850	S	63	85	80
Peas, Improved Tall Telephone	14868	S	66	85	80
Peas, World's Record	14872	S	61	85	80
MANDEVILLE & KING CO., Rochester, N. Y.					
Tracy's Hardware, Pittsfield					
Carrot, Danvers Half Long	14924	S	S	78	55
Onion, Southport Yellow Globe	14923	S	S	77	70
MERRIMACK FARMERS' EXCH., INC., Concord					
Merrimack Farmers' Exchange, Inc., Concord					
Beets, Early Wonder	15106	S	S	..	65
Broccoli, Early Green Calabrese	15110	S	S	..	75
Carrot, Danvers Half Long	15112	S	S	..	55
Corn, Marcross	15098	S	S	..	75
Corn, Northland	15105	S	S	..	75
Endive, Deep Heart	15111	S	S	..	70
Onions, Southport White Globe	15107	S	S	..	70
Onions, Danvers Yellow Globe	15108	S	S	..	70
Parsnip, Hollow Crown	15101	S	S	..	60
Peas, Merrimack Improved Telephone	15102	S	S	..	80
Peas, Little Marvel	15103	S	S	..	80
Pepper, Merrimack Wonder	15109	S	S	..	55
Squash, Table Queen	15099	S	S	..	75
Tomato, N. H. Victor	15100	S	S	..	75
NORTHRUP, KING & CO., Minneapolis, Minn.					
General Mills, Inc., Exeter					
Beets, Detroit Dark Red	15137	S	S	..	65
Onions, Yellow Globe Danvers	15138	S	S	..	70
Parsley, Dark Moss Curled	15135	S	S	..	60
Parsnip, Improved Hollow Crown	15136	S	S	..	60

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Newport Grain Co., Newport					
New Zealand Spinach	15114	S	S	..	40
Parsnip, Improved Hollow Crown	15120	S	S	..	60
Radish, Long Scarlet, Short Top	15113	S	S	..	75
Rutabaga or Swede, American Purple Top	15127	S	S	..	75
Tomato, Chalk's Early Jewell	15123	S	S	..	75
PAGE SEED CO., Greene, N. Y.					
Grafton County Feed Store, North Haverhill					
Beans, Vermont Cranberry	15144	S	35	80	75
Beans, Improved Golden Wax	15146	S	S	80	75
Corn, Golden Bantam	15145	S	S	85	75
Rand, Ball & King Hardware, Claremont					
Beets, Early Blood	14955	S	S	75	65
Beets, Early Blood	14949	S	S	75	65
Cucumber, Davis Perfect	15009	S	72	80	80
Onion, Prizetaker	14953	S	60.5	70	70
Onion, Yellow Globe Danvers	14954	S	70÷	80	70
Parsnip, Hollow Crown, I	14951	S	S	60	60
Parsnip, Hollow Crown, II	14952	S	S	60	60
Radish, Scarlet Globe	15017	S	S	..	75
PURINA SEEDS, St. Louis, Mo.					
Checkerboard Feed Store, Dover					
Carrot, Chantenay	14804	S	S	55	55
Cucumber, Long Green	14806	S	S	80	80
Lettuce, Grand Rapids	14807	S	S	85	80
Radish, Early Scarlet Globe	14808	S	S	80	75
Turnip, Purple Top White Globe	14809	S	S	80	80
JEROME B. RICE SEED CO., Cambridge, N. Y.					
Concord Hardware Co., Concord					
Carrot, Imperator	14781	S	S	55	55
Celery, Golden Self-blanching	14779	S	S	60	55
Cucumber, Chicago Pickling	14783	S	S	80	80
Lettuce, White Paris Cos (Romaine)	14782	S	S	85	80
Salsify, Mammoth Vegetable Oyster	14780	S	S	75	75
Thompson & Hoague Co., Concord					
Beets, Crosby's Egyptian	14774	S	S	70	65
Carrot, Danvers Half Long	14775	S	S	55	55
Endive, Full Heart Batavian	14776	S	S	70	70
Parsley, Champion Moss Curled	14777	S	S	65	60
Rutabaga or Swede, Imp. Am. Purple Top	14778	S	S	80	75
J. B. RICE, Shushan, N. Y.					
Lafayette Automotive Store, Littleton					
Beans, Yellow Eye	15092	S	S	85	75
Scruggs Hardware, Woodsville					
Peas, Sutton's Excelsior	15152	S	S	90	80
RICE SEED CO., Metamose, Ohio					
H. P. Maxfield, Pittsfield					
Corn, Earligold Hybrid	14880	S	S	..	75
ROSS BROTHERS CO., Worcester, Mass.					
Arthur L. Potter, Conway					
Beets, Dewing's Early Blood Turnip	15059	S	S	..	65
Swiss Chard	15060	S	S	..	65
Turnip, Purple Top White Globe	15061	S	S	..	80
SEARS, ROEBUCK & CO., Chicago, Ill.					
Sears, Roebuck & Co., Concord					
Beets, Early Wonder	14751	S	S	70	65
Beets, Detroit Dark Red	14754	S	S	70	65
Carrot, Danvers	14752	S	S	55	55
Cauliflower, Early Snowball	14753	S	S	75	75
Cucumber, Straight Eight	14755	S	S	80	80
JOHN B. VARICK CO., Manchester					
White's Store, North Haverhill					
Corn, Early Orange	15150	S	S	90	75
Corn, Golden Bantam	15151	S	S	86	75

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F. H. WOODRUFF & SONS, INC., Milford, Conn.					
G. N. Bartemus Co., Concord					
Beans, Pencil Pod Black Wax	14741	S	S	88	75
Beans, Burpee's Stringless Green Pod	14743	S	S	90	75
Beans, Dwarf Horticultural	14745	S	S	90	75
Corn, Early Yellow Sensation	14740	S	S	90	75
Peas, Thomas Laxton	14744	S	75	83	80
Checkerboard Feed Store, Manchester					
Beans, Red Kidney	14855	S	S	90	75
Curtis Hardware, Berlin					
Beans, Soldier	15044	S	S	90	75
Beans, Bountiful	15057	S	S	90	75
Beans, Golden Wax	15058	S	S	80	75
General Mills, Inc., Exeter					
Beans, Kentucky Wonder	15129	S	S		75
Beans, Boston Navy Pea	15151	S	S	75	75
Beans, Red Kidney	15140	S	S		75
Corn, Marcross Hybrid	15128	S	S	90	75
Corn, Bantam Evergreen	15132	S	69	90	75
Peas, Nott's Excelsior	15130	S	67	90	80
Peas, Gradus	15133	S	70	86	80
General Mills, Inc., Nashua					
Beans, Kentucky Wonder	14912	S	S	70	75
Beans, French Horticultural	14916	S	S	82	75
Beans, Yellow Eye	14917	S	S	70	75
Corn, Bantam Evergreen Hybrid	14903	S	S	90	75
Lima Beans, Fordhook Bush	14899	S	S	90	70
Peas, Sutton's Excelsior	14901	S	66	65	80
Keene Grain Co., Keene					
Beans, Vermont Cranberry	15073	S	S	89	75
Beans, Improved Yellow Eye	15076	S	S	90	75
Beans, London Horticultural Pole	15078	S	S	85	75
Corn, Golden Cross Bantam	15077	S	S	90	75
Corn, Marcross	15080	S	S	90	75
Corn, Improved Golden Bantam	15081	S	S	90	75
Corn, Spancross	15083	S	S	90	75
Lima Beans, Burpee's Improved Bush	15075	S	73÷	84	70
Peas, Blue Bantam	15074	S	S	90	80
Peas, Dwarf Telephone	15079	S	S	81	80
Peas, Improved Telephone	15082	S	S	90	80
C. P. Roy, Somersworth					
Corn, Golden Bantam	14854	S	S	90	75
Peas, World's Record	14860	S	S	90	80
S. D. WOODRUFF & SONS, INC., Orange, Conn.					
Checkerboard Feed Store, Concord					
Beets, Crosby's Egyptian	14768	S	S	70	65
Cabbage, Chihli	14767	S	S	75	75
Carrot, Danvers Half Long	14761	S	S	65	55
Cauliflower, Snowball	14766	S	S	75	75
Cucumber, Improved White Spine	14765	S	S	80	80
Lettuce, Big Boston Head	14764	S	S	80	80
Muskmelon, Hale's Best	14762	S	S	75	75
Onion, Yellow Globe Danvers	14763	S	S	70	70

In the case of the following samples of vegetable seeds, either the wholesaler is unknown or it is presumed that the seed was carried over by the dealer from the previous season; hence, the name of the wholesaler is omitted.

Ayers & Jenkins Co., Rochester					
Peas, Dwarf Telephone	14864	None	S	..	80
Cole's Hardware, Littleton					
Beans, Kentucky Wonder	14938	None	S	..	75
Beans, P. P. Black Wax	14942	None	S	..	75
Beans, Burpee's Stringless Green Pod	14944	None	S	..	75

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K. W. Cota, North Haverhill					
Peas, Tall Telephone	15143	None	72.5	..	80
Curtis Hardware, Berlin					
Corn, Evergreen	15022	S	S	90	75
Corn, Marcross C, 13 x 6	14969	S	S	90	75
Peas, Improved Telephone	15024	S	S	90	80
Peas, Laxtonian	15036	None	S	..	80
Farmers Feed & Supply, Colebrook					
Peas, Gradus	15023	None	S	..	80
Farmers Feed & Supply, Newport					
Beans, Golden Wax	15067	None	S	..	75
Beans, Pencil Pod Black Wax	15068	None	S	..	75
Corn, Golden Sunshine	15066	None	S	..	75
Peas, Tall Telephone	15062	None	S	..	80
Peas, Gradus	15064	None	S	..	80
Peas, Laxton's Progress	15065	None	56	..	80
Charles J. Goss, Lakeport					
Beans, Scarlet Runner	14877	None	47	51	75
Beans, Sulfur	14882	4/1947	S	87	75
Corn, Black Mexican	14876	4/1947	S	78	75
Corn, Golden Sunshine	14878	1/1947	S	83	75
Hicks' Hardware, Colebrook					
Beans, Red Kidney	14956	1/1947	S	90	75
Beans, Red Valentine	15032	12/1946	80÷	89	75
Lafayette Automotive Store, Littleton					
Beans, Soldier, 1	15090	None	S	..	75
Beans, Kentucky Wonder	15093	None	S	..	75
Peas, Telephone	15091	None	S	..	80
Peas, Hundredfold	15094	None	S	..	80
Mabbett Home & Auto Supply, Rochester					
Corn, Golden Bantam	14858	None	S	..	75
Peas, Improved Gradus	14851	None	S	..	80
Merrimack Farmers' Exchange, Inc., Concord					
Corn, Merrimack Hybrid	15104	None	S	..	75
Onions, Southport White Globe	14739	1/1946	46	90	70
L. O. Moulton, Ossipee					
Peas, Laxton's Progress	14945	11/1946	S	90	80
Rand, Ball & King Co., Claremont					
Beans, Bush Cranberry	15015	11/1946	S	..	75
Peas, Thomas Laxton	15010	11/1946	72.5	80	80
Pumpkin, Connecticut Field	15007	11/1946	69.5	75	75
Reddy's Market, Contoocook					
Corn, Golden Bantam, Western grown	15071	None	S	..	75
Peas, Dwarf Telephone	15063	None	68.5	..	80
Peas, Blue Bantam	15072	1/1947	S	80	80
Ryan's Hardware Store, Gorham					
Corn, Golden Bantam	15054	None	S	..	75
Peas, Tall Telephone	15031	None	S	..	80
Peas, Early Morn	15056	None	S	..	80

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